Motia Installation Guide

City Smart Pro (AI Side Scan) Mobile App Setup Guide

Following the hardware installation of the City Smart Pro AI hardware the next step is to connect to the unit via the AWAI Android mobile app.

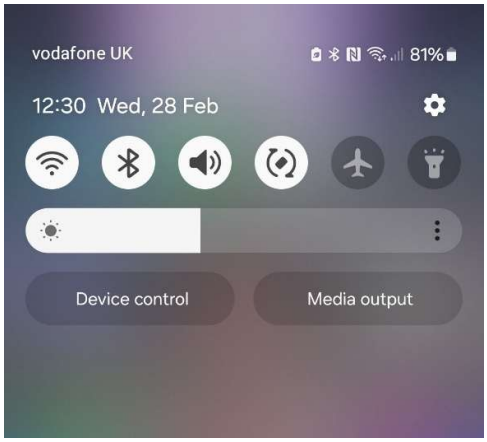
If you have not yet installed the City Smart Pro hardware then a guide for this is available here.

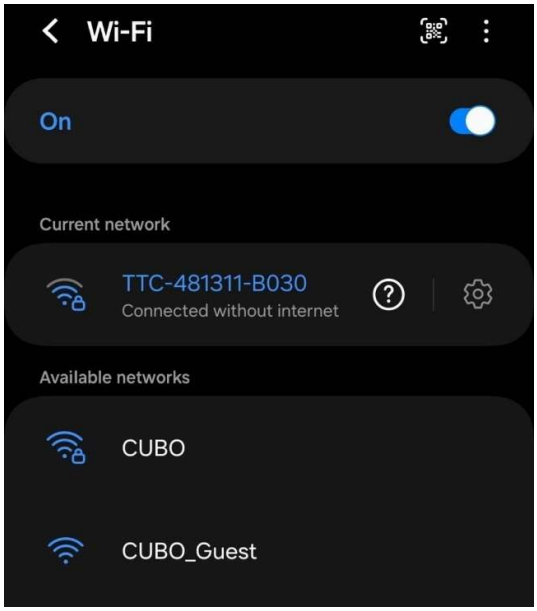
Download the Android mobile app

The AWAI Android app can be downloaded on to your mobile or tablet by clicking here. Before opening the app the next step is to connect to the unit via Wi-Fi.

Connect to the City Smart Pro AI unit using Wi-Fi

The mobile app connects to the City Smart Pro AI unit via Wi-Fi so open your Wi-Fi settings on your Android device and search for available Wi-Fi networks. For most Android devices this is achieved by scrolling down from the top screen and holding the Wi-Fi icon. It can also be accessed by selecting the Android settings icon followed by Connections >> Wi-Fi.





The AI unit will present a network **SSID with a name prefixed TTC such as "TTC-xxxxxx-xxxx"** with a unique value in place of the x's. The password to connect to all units is **TTC123456**

Your Android device may prompt you to say no internet connection is available on this network and do you still want to connect, click yes always connect.

Open the AWAI Configuration App:

Once connected to the unit via Wi-Fi locate the AWAI app as shown below and click to open it:

Upgrading the Firmware and/or Configuration File

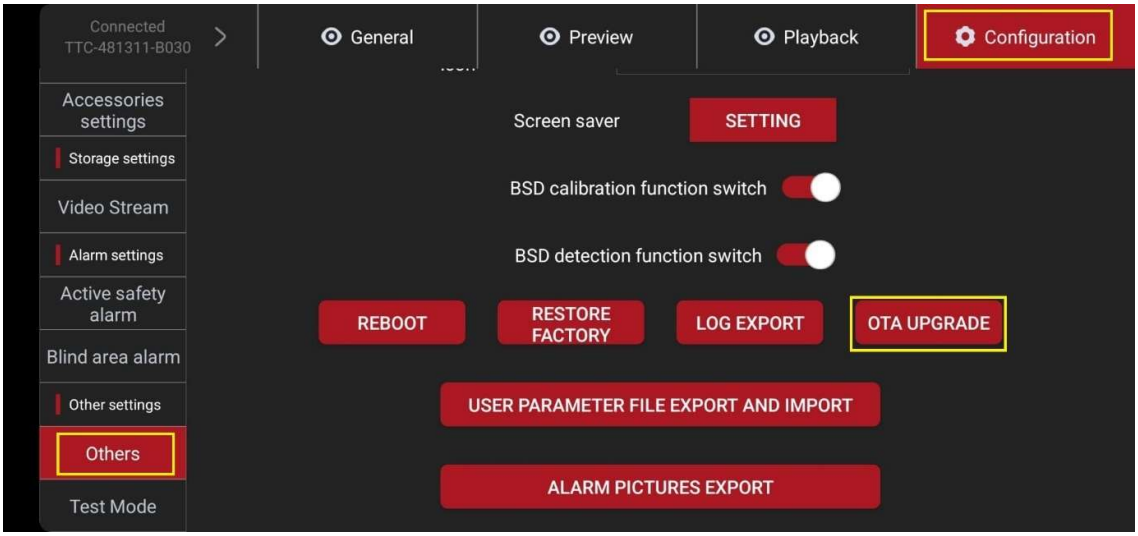
If you have instructed by Motia to upgrade the firmware and/or configuration file then you will need to download the following file/s to your Android device. If you have not been asked to do this then please **skip this step**.

The latest firmware can be downloaded by clicking here

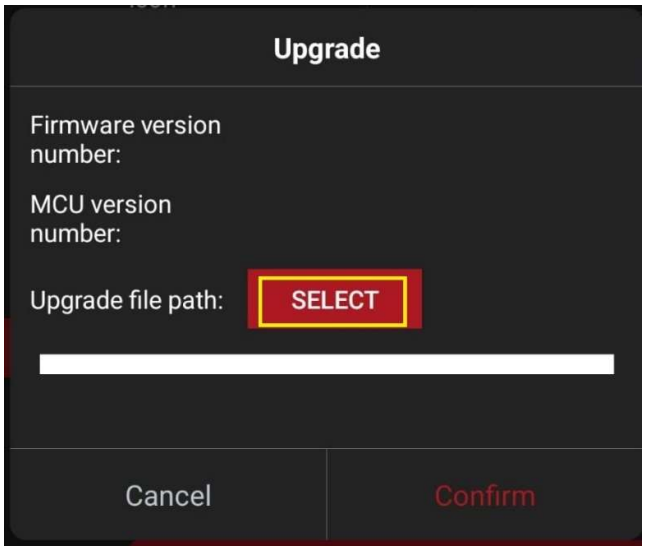
The latest configuration file can be downloaded by clicking here

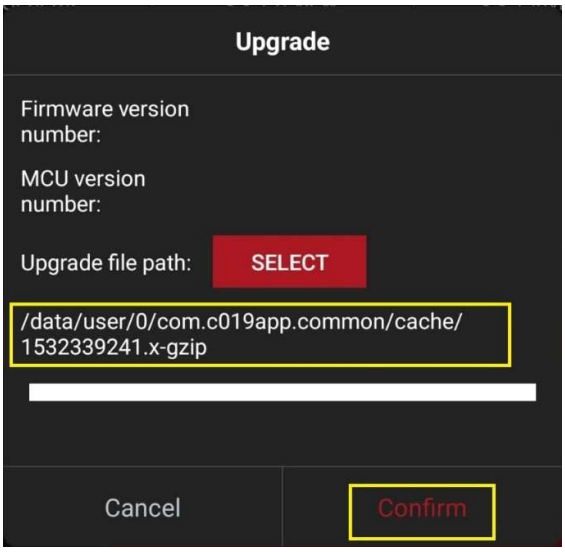
Upgrading the Firmware

To access the firmware upgrade page go to '**Configuration**' in the top right hand corner and then select '**Others**' from the left hand menu as shown below. The '**OTA Upgrade**' button is display on the right hand side approx. half way down the screen. Click on this button to launch the firmware upgrade process.



Click '**Select**' and then locate the firmware file that you downloaded in the earlier steps, the name of the file will be similar to 887-rd-c039-v01r001b030-part-20240224071940-tar-gz. Click '**Confirm**' to begin the upgrade process.

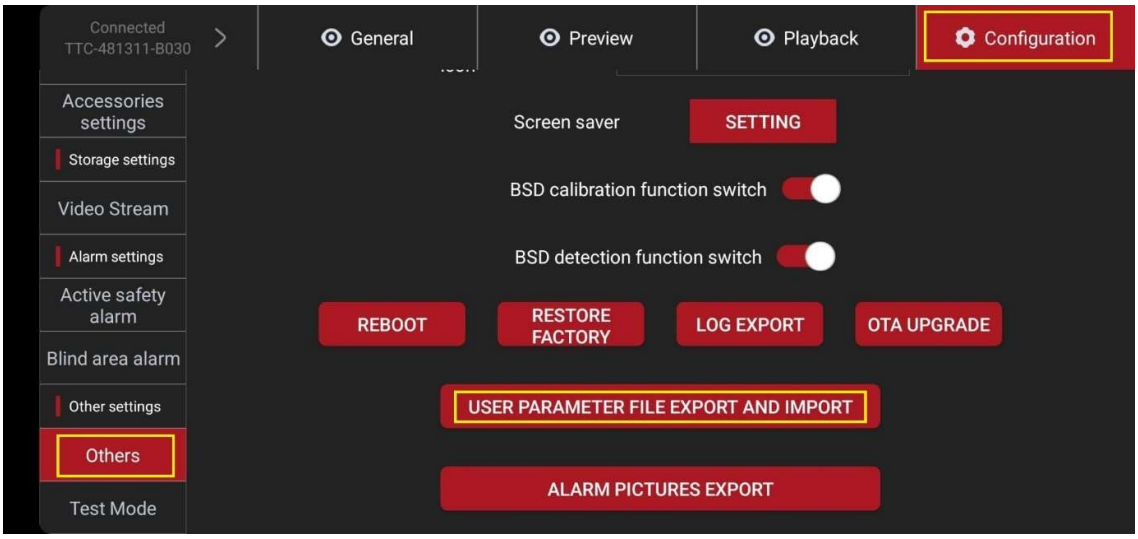




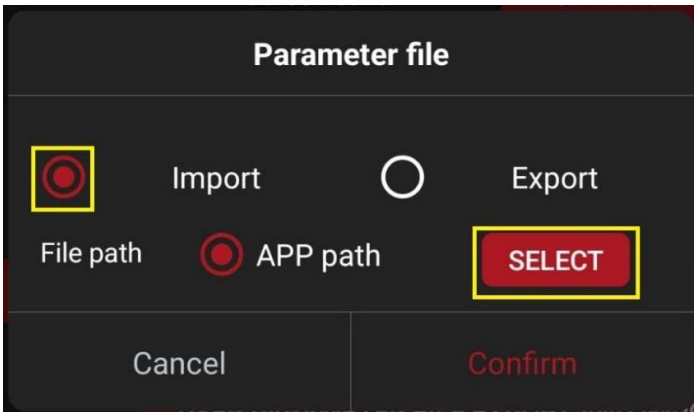
Please note, the firmware upgrade takes approx. 7 mins to complete and you must wait until the status bar completes to 100, it will automatically disconnect from the Wi-Fi and the upgrade will only be complete when the local Wi-Fi becomes available again and the name changes to TTC-xxxxxx-xxxxB030 or whichever FW version it is.

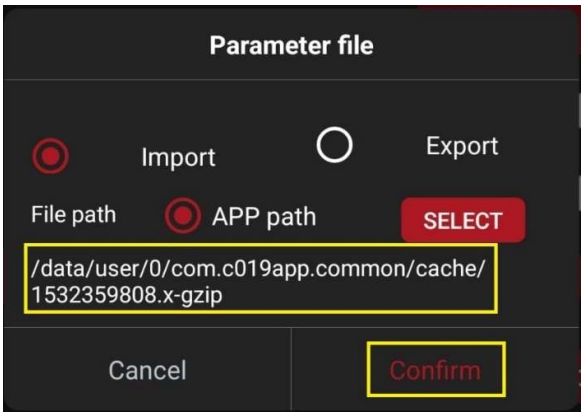
Upgrading the Configuration (User Parameter) File

To upload the latest configuration file select '**Configuration**' in the top right corner and then '**Others**' on the left hand side as shown below. Click on the '**User Parameter File Export and Import**' button to launch to configuration file menu:



Ensure the '**Import**' button is highlighted and the click '**Select**' to upload to the configuration file. Locate the configuration file on your Android device that you downloaded in the earlier steps of this guid and then click '**Confirm**'.





The file will be uploaded to the City Smart Pro AI unit and then it will restart. The Wi-Fi connection may drop during this process so please reconnect if required before continuing setup.

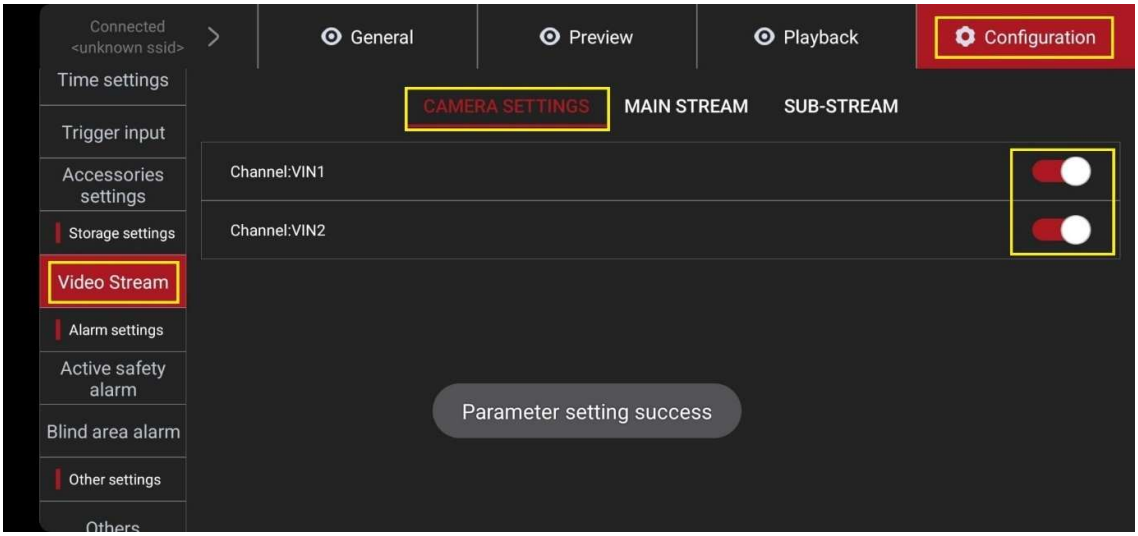
Configuring the City Smart Pro AI unit for MOIS and/or BSIS mode

Depending on whether the vehicle requires the MOIS (Front) and/or BSIS (Blind Spot) detection zones you will need to enable/disable these as applicable. To access this page on the AWAI app go to '**Configuration**' >> '**Video Stream**' >> '**Camera Settings**' as shown below.

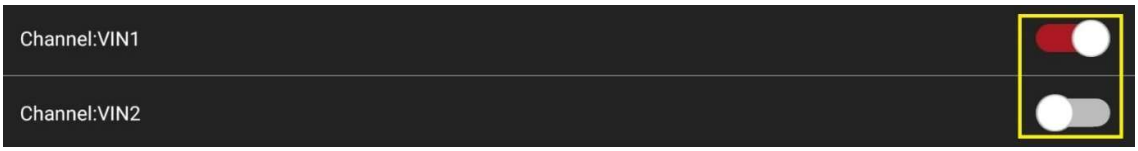
Toggle the VIN1 and VIN2 enabled/disabled buttons to match the installation requirement.

Vin 1 = BSIS (Blind Spot Information Systems) Blind Spot Camera Zone

Vin 2 = MOIS (Moving Off Information Systems) Front Camera Zone

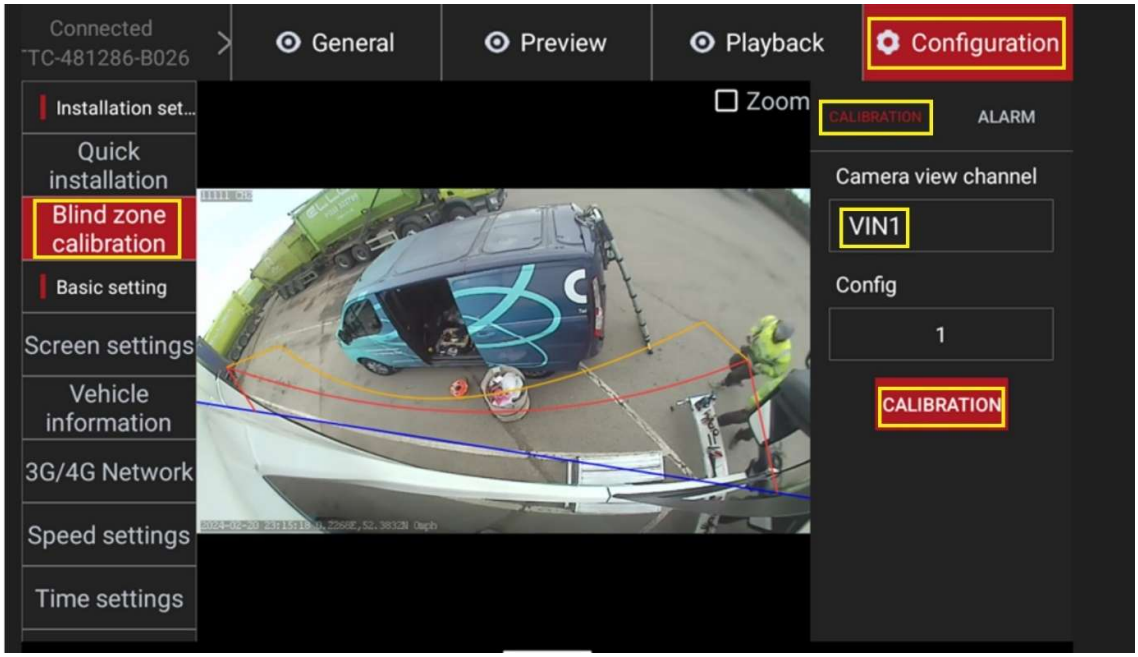


Example of setting the AWAI app to be a BSIS only system:



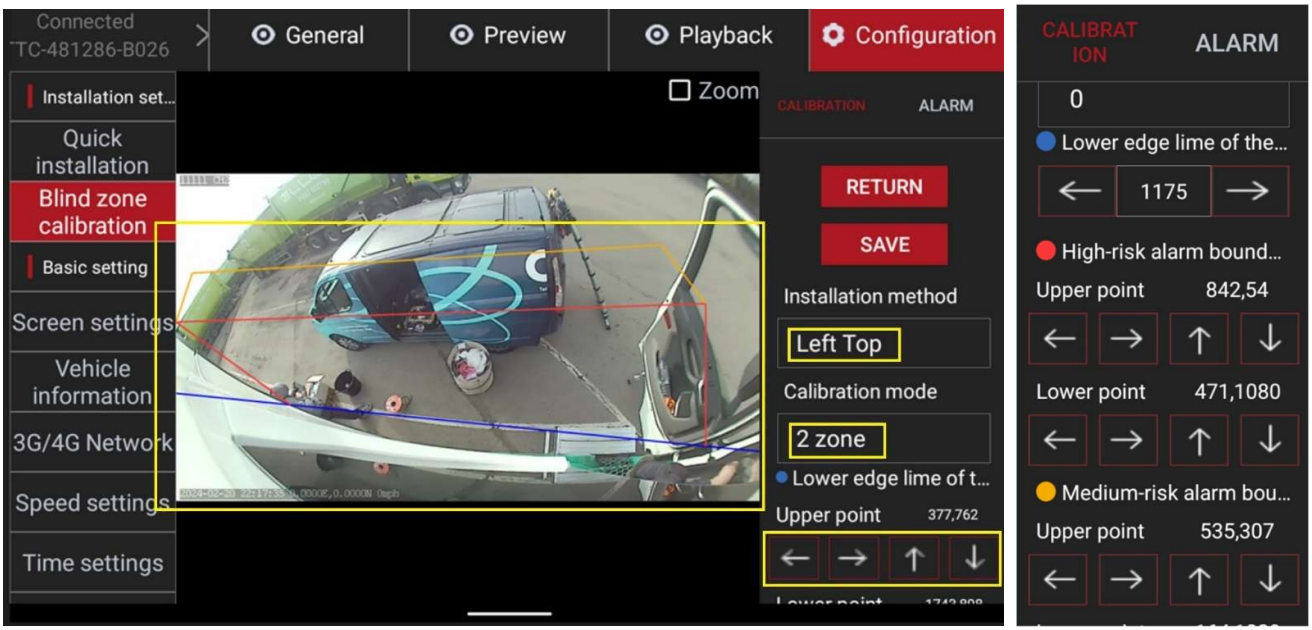
BSIS (Blind Spot Information Systems) Camera Setup

If your system has the BSIS zone you will need to configure the BSIS detection zone on the AWAI app, Access this menu by selecting '**Configuration**' << '**Blind zone calibration**' >> '**Calibration**' as shown below. Check **VIN1** is selected as the **camera view channel** and then click '**Calibration**':

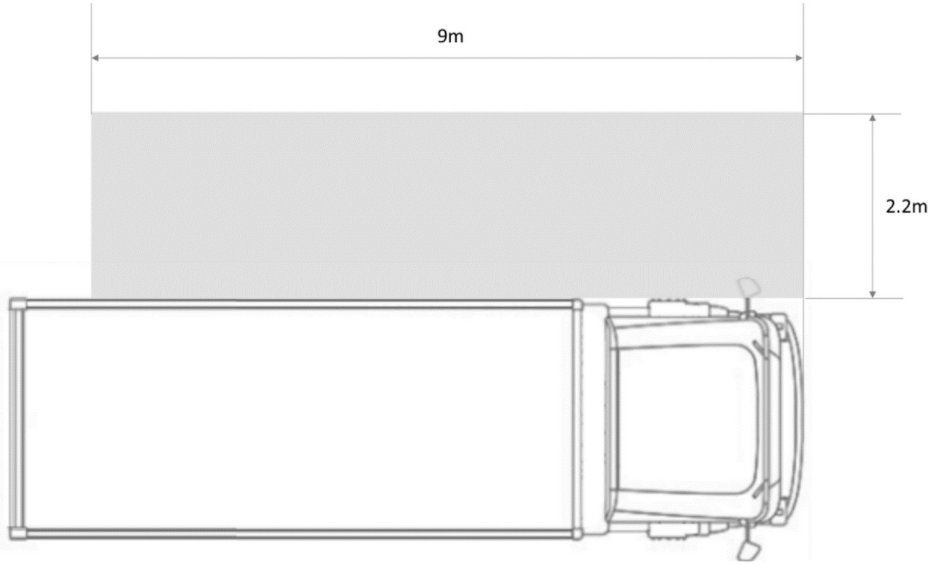


Ensure the '**Installation Method**' is set to "**Left Top**" and that the '**Calibration Mode**' is set to '**2 Zone**' at shown below.

Using the up/down/left/right arrows adjust the zones as required. Scrolling down the page will allow you to see the blue (vehicle baseline/edge), yellow (medium risk zone) and red (high risk zone) lines. You need to ensure the yellow zone covers the full BSIS 9m x 2.2m detection zone, the red zone can be narrowed for closer proximity to be approx. 0.8m - 1m from the vehicle.



The below image shows the TFL (Transport for London) BSIS requirement zone that the above detection area must cover. Please ensure the zone covers to the front left corner of the vehicle and does not stop at the wing mirror.



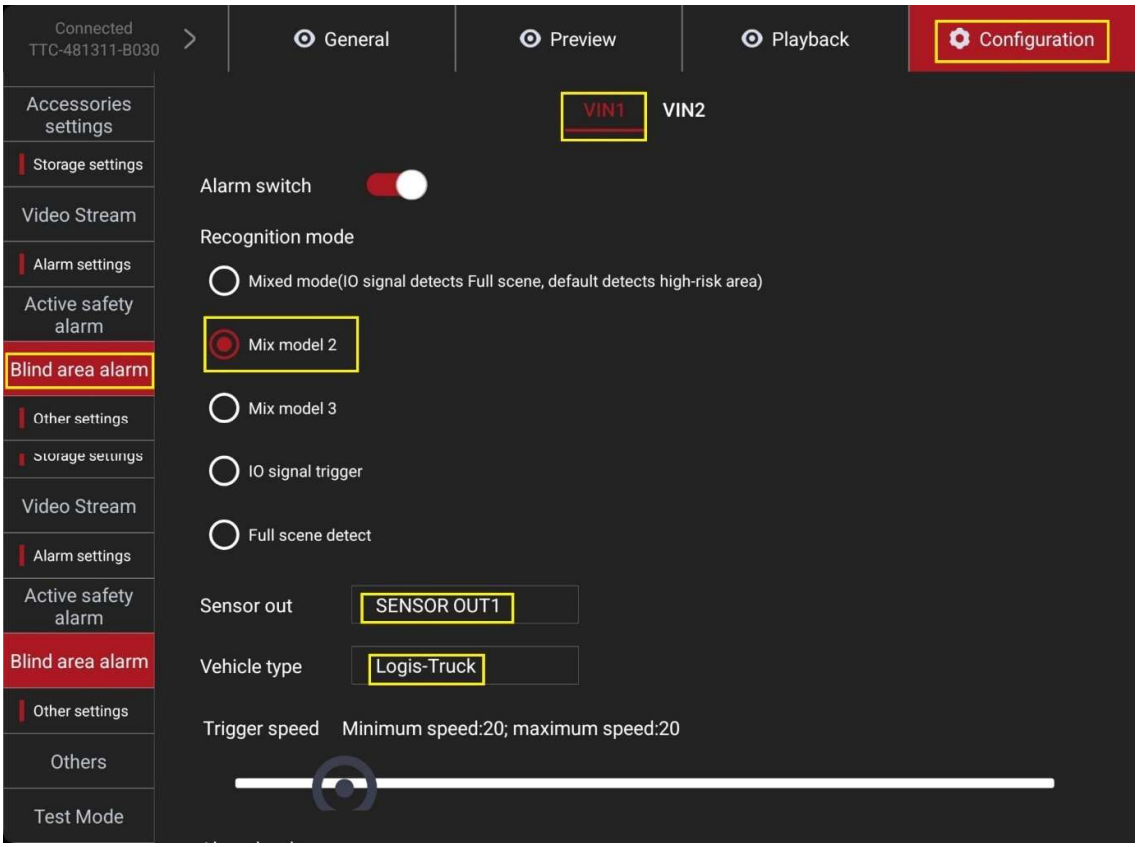
BSIS Zone Alarm Configuration

The next step is to configure the alarms for the BSIS detection, to access the Blind area alarm menu go to '**Configuration**' >> '**Blind Area Alarm**'.

Ensure '**VIN1**' is selected at the top for the BSIS zone and then select '**Mix model 2**' for the recognition mode which will configure the audible alert to sound once in the yellow detection zone and repeatedly in the red detection zone.

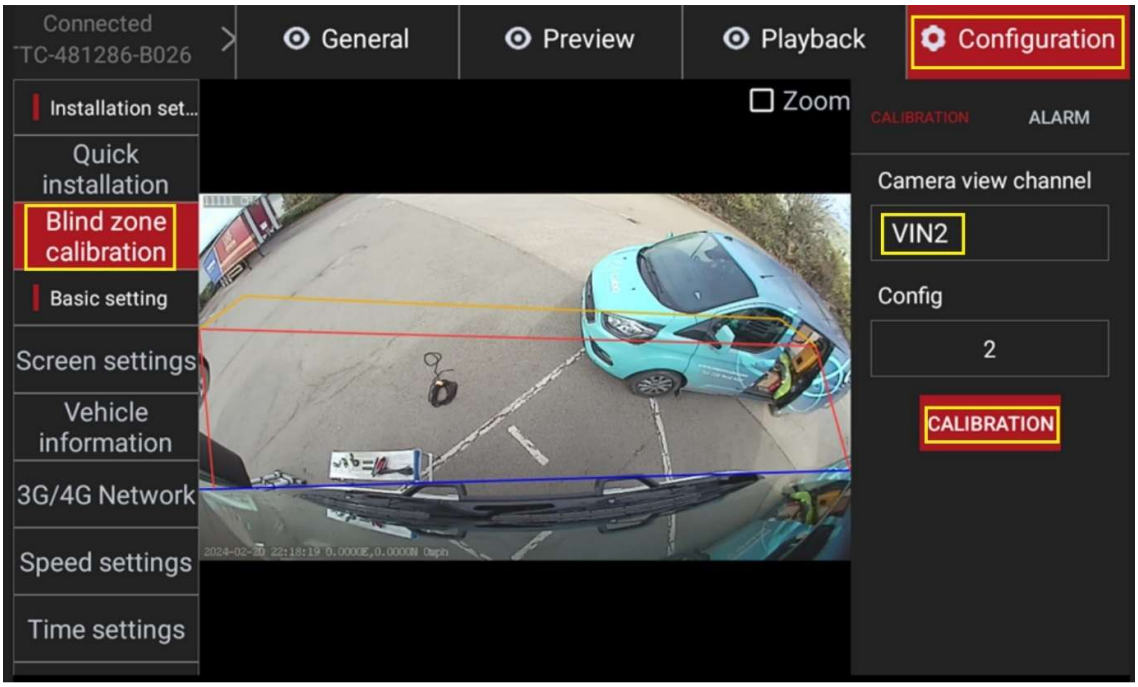
The **Sensor out** setting needs to be set to '**SENSOR OUT1**' to enable the LTA alarm for the BSIS zone when the left indicator is on, and set the **vehicle type** to be '**Logis-Truck**' as shown below.

The trigger speed is hard encoded to 20mph to prevent the alert going off over 20mph so no changes are required here. When you have finished scroll to the bottom and click '**Setting**' to save the changes.



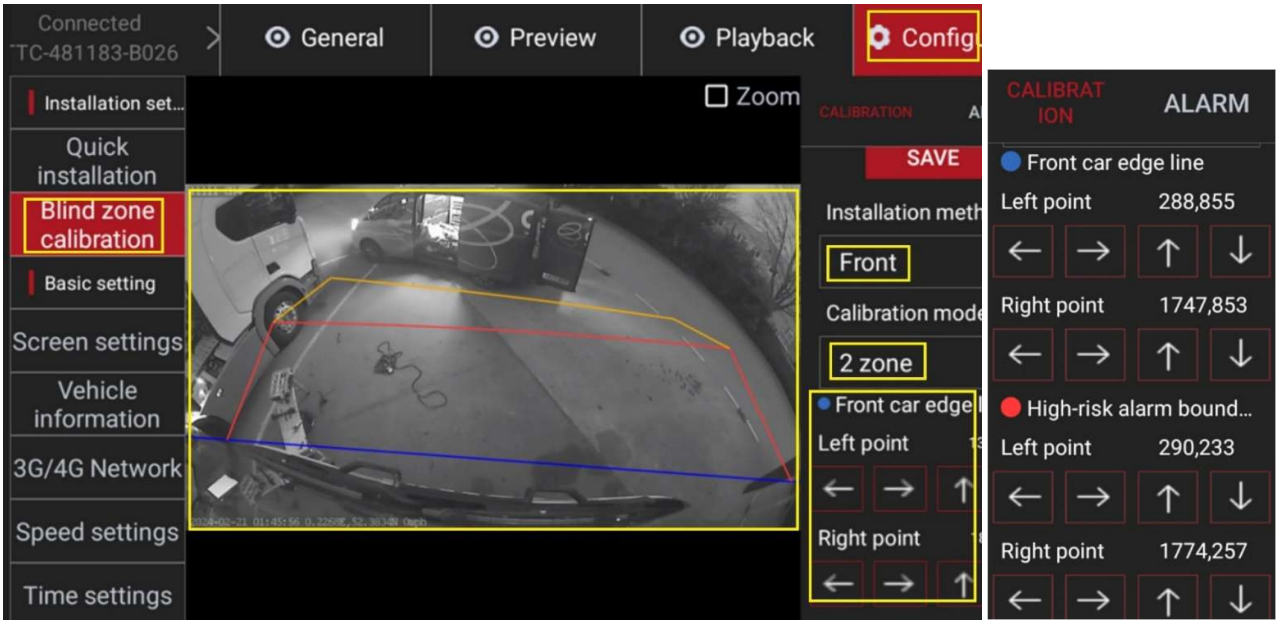
MOIS (Moving Off Information Systems) Front Detection Camera Configuration

If your system has the MOIS zone you will need to configure the MOIS detection zone on the AWAI app, Access this menu by selecting '**Configuration**' << '**Blind zone calibration**' >> '**Calibration**' as shown below. Check **VIN2** is selected as the **camera view channel** and then click '**Calibration**':

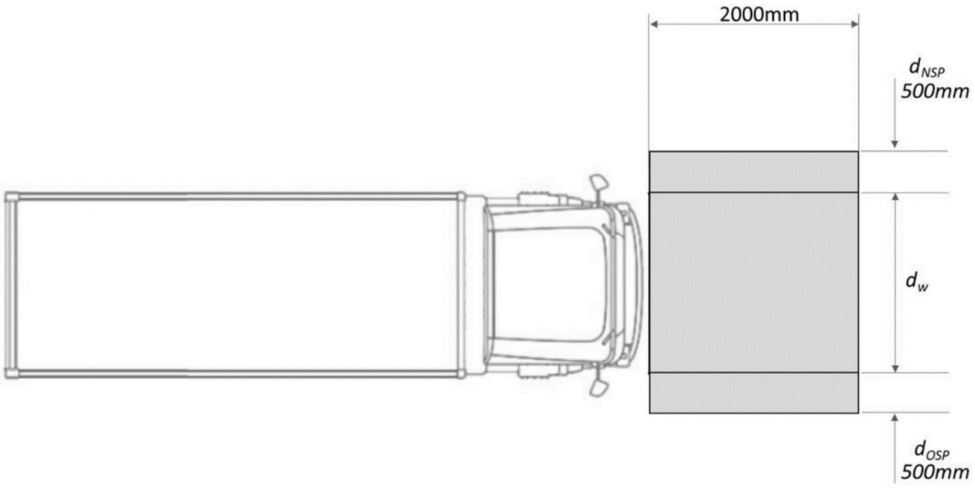


Ensure the '**Installation Method**' is set to "**Front**" and that the '**Calibration Mode**' is set to '**2 Zone**' at shown below.

Using the up/down/left/right arrows adjust the zones as required. Scrolling down the page will allow you to see the blue (vehicle baseline/edge), yellow (medium risk zone) and red (high risk zone) lines. You need to ensure the yellow zone covers the full MOIS 2m x (vehicle width + 0.5m overhang left + right) detection zone, the red zone can be narrowed for closer proximity to be approx. 0.8m - 1m from the vehicle.



The below image shows the TFL (Transport for London) MOIS requirement zone that the above detection area must cover. Please ensure the zone covers 0.5m over hang to the left and right of the vehicle and does not stop at the vehicle edges.



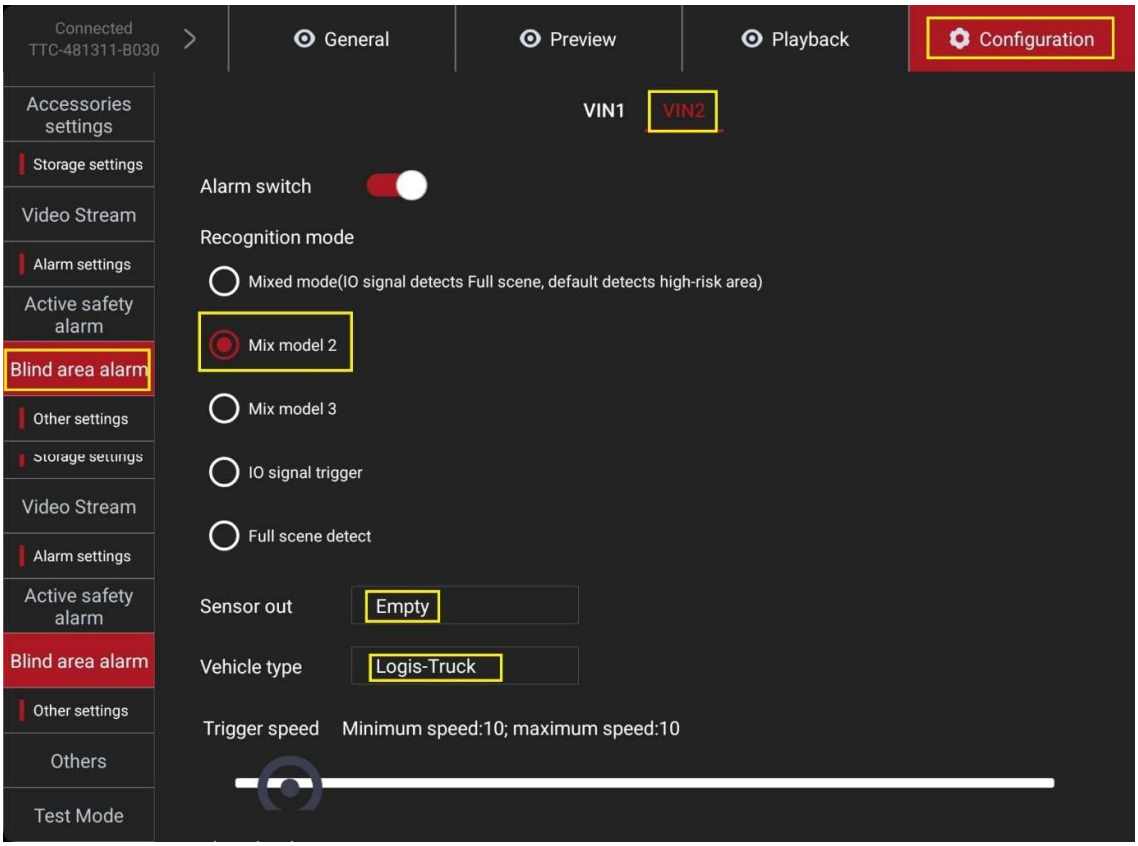
MOIS Zone Alarm Configuration

The next step is to configure the alarms for the MOIS detection, to access the Blind area alarm menu go to '**Configuration**' >> '**Blind Area Alarm**'.

Ensure '**VIN2**' is selected at the top for the MOIS zone and then select '**Mix model 2**' for the recognition mode which will configure the audible alert to sound once in the yellow detection zone and repeatedly in the red detection zone.

The **Sensor out** setting needs to be set to '**Empty** ' so that it does not sound the LTA alarm when the left indicator is on, and set the **vehicle type** to be '**Logis-Truck**' as shown below.

The trigger speed is hard encoded to 20mph to prevent the alert going off over 10mph so no changes are required here. When you have finished scroll to the bottom and click '**Setting**' to save the changes.



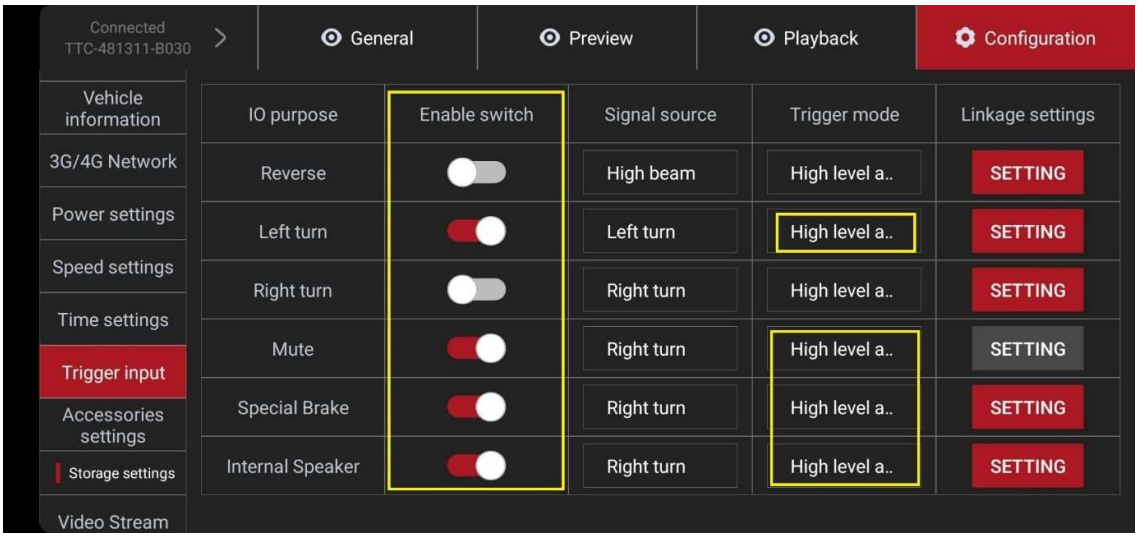
Trigger Inputs Setup

The next step is to configure the trigger inputs. Go to **Configuration** >> **Trigger input** to enable/disable the required triggers.

Disable '**Reverse**' and '**Right Turn**' and Enable the remaining 4 triggers, '**Left Turn**', '**Mute**', '**Special Brake**' and '**Internal Speaker**' as shown below

Set the **Trigger Mode** for the enabled option to be '**High Level**'.

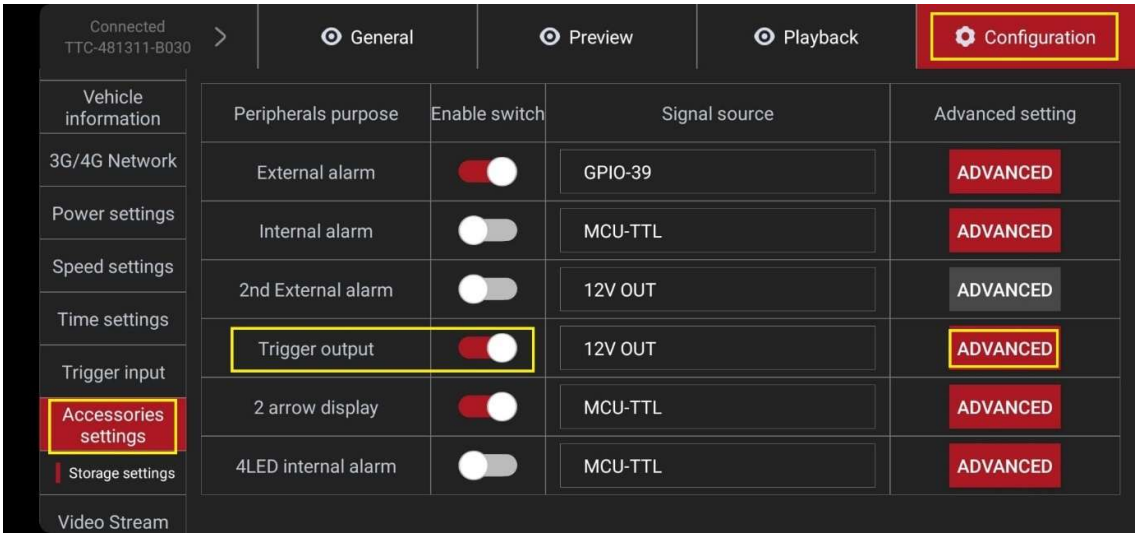
Once configured, the trigger input settings page should look like this:



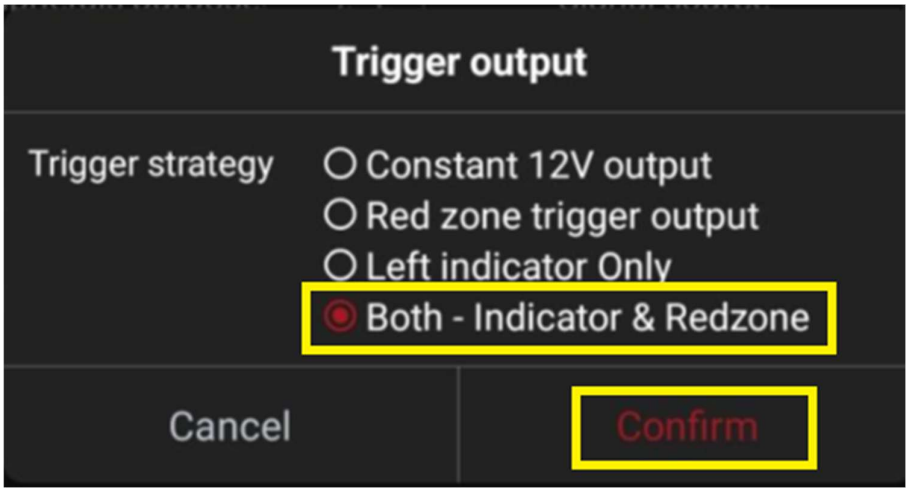
Trigger Output Setup

In order to ensure the monitor turns on (if off) and also switches to the RCA channel the 12v out trigger wire is connected as part of the hardware installation but it needs to be enabled as a trigger output in the AWAI mobile app as well. (If installing the City Smart Pro system with a Calamp this is also the same trigger connected to the grey fly lead input 4 of the Calamp)

Go to '**Configuration**' << '**Accessories Settings**' as shown below and ensure the '**Trigger output**' toggle is enabled. To configure the output settings click on '**ADVANCED**' as shown below:



Select '**Both Indicator & Redzone**' as the trigger output and click '**Confirm**' to save the settings:

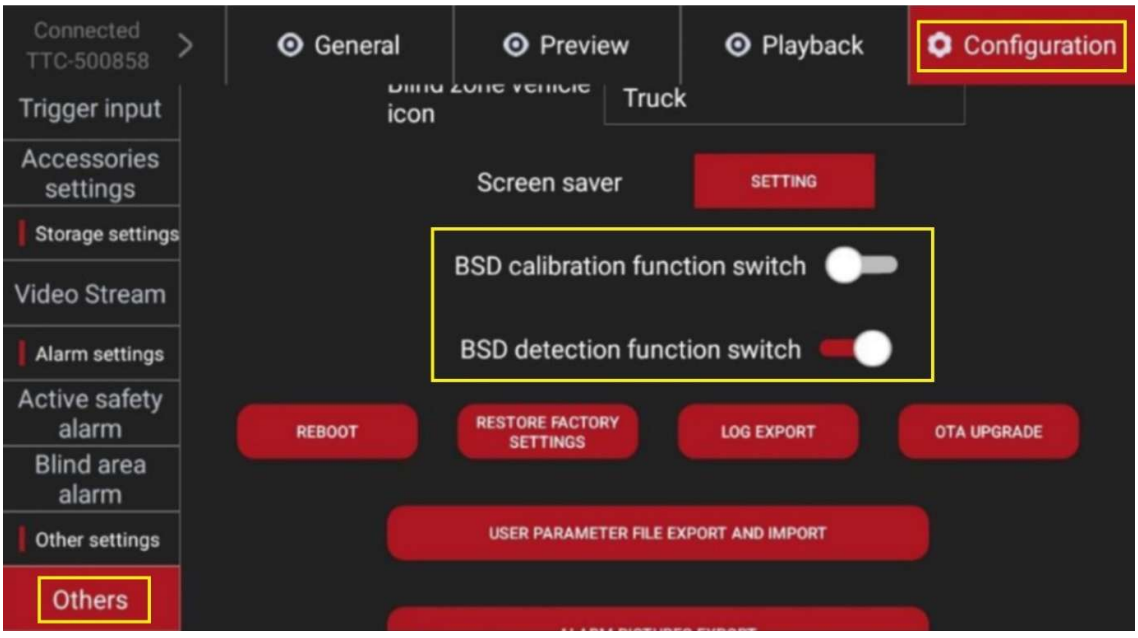


Driver Monitor Settings for BSD (Blind Spot Detection)

The monitor can be configured to give the driver a visual aid for the BSD (blind spot detection) zones. These can be accessed from the **Configuration** >> **Others** page as shown below.

There are two settings available:

- '**BSD calibration function switch**' when enabled this will show the detection areas in the video output. The preference for this feature is to be **disabled** by most drivers.
- '**BSD detection function switch**' when enabled this will show a box around a detected object. The preference for this feature is to be **enabled** by most drivers



This completes the setup of the City Smart Pro, please ensure to capture all job photos and a video of the detection zones as prompted by Nexus or your engineer job card.